











# RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 2, Ending January 14, 2023

Wisconsin Department of Health Services | Division of Public Health

Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

www.dhs.wisconsin.gov/dph/bcd.htm | dhsdphbcd@dhs.wi.gov











# **AT-A-GLANCE:**

#### Predominant Viruses of the Week:

Influenza A is the predominant virus this week.

#### **Current Alerts:**

- Outpatient influenza-like illness activity and the percent positive influenza lab tests continue to decline in Wisconsin.
- Additional data on SARS-CoV-2 (the virus causing COVID-19) trends in Wisconsin can be found at: https://www.dhs.wisconsin.gov/covid-19/data.htm

# **INFLUENZA-ASSOCIATED** PEDIATRIC DEATHS REPORTED:

	Week 2, 2023	October 1, 2022 to present
Wisconsin	0	3
Nationwide	6	85

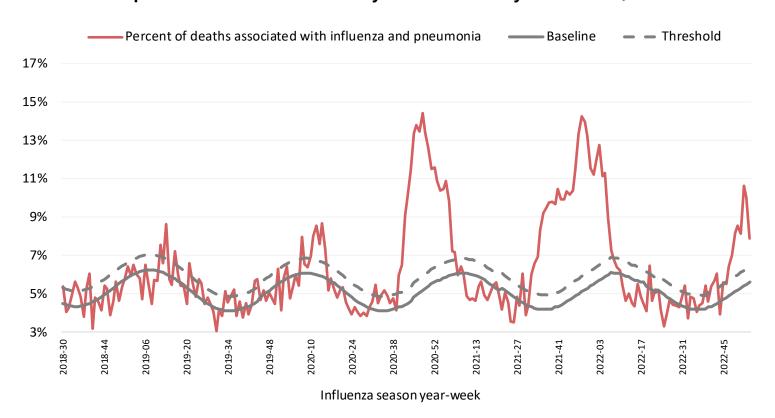
For National US influenza surveillance statistics visit: <a href="www.cdc.gov/flu/weekly/">www.cdc.gov/flu/weekly/</a>



# INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

### Influenza and Pneumonia Deaths, Wisconsin

#### Influenza- and pneumonia-associated deaths by influenza season year and week, Wisconsin



#### Influenza- and pneumonia-associated deaths by most recent 3 week period.

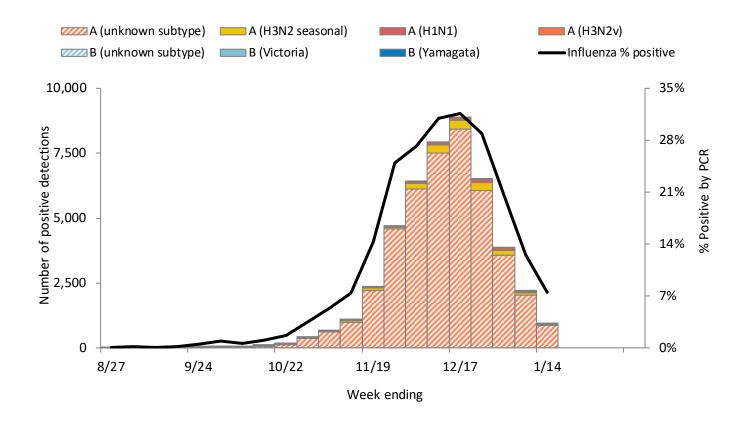
Influenza season week	Influenza- associated deaths (I)	Pneumonia- associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
52	27	106	8.0%	5.3%	6.1%
1	24	125	10.0%	5.4%	6.2%
2 Preliminary Data	11	77	7.9%	5.5%	6.3%

Data source: <u>DPH, Office of Health Informatics</u>



# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

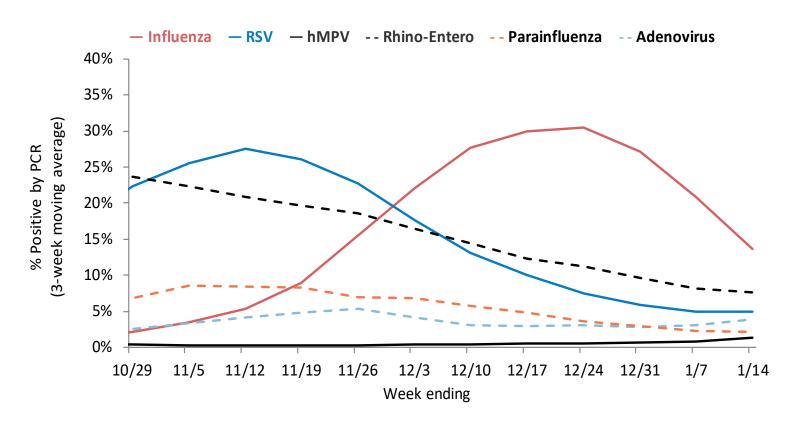
#### Wisconsin positive influenza results and subtypes by PCR



# Cumulative number of positive influenza PCR tests by subtype October 1, 2022 to present

	A (2009 H1N1)	Influenza A: A (H3N2)	100% A (Unknown)	B (Victoria)	Influenza B: B (Yamagata)	0% B (Unknown)	Total
Total positive (n)	639	1,792	43,644	2	0	227	46,304
% of total positive	1%	4%	94%	0%	0%	0%	100%

# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES

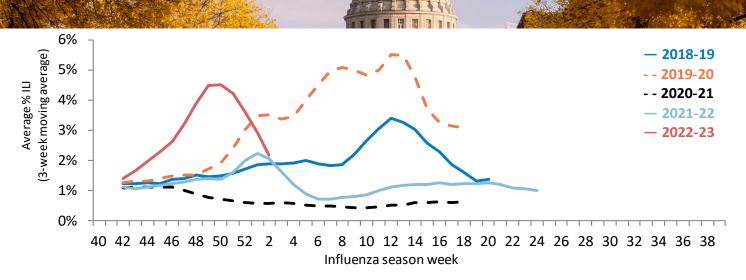


Week 2, Ending on January 14, 2023

		Positive	Positive	Positive	Positive		Influenza	Α				Influen	za B	
Respiratory virus	Tested	(n)	(%)	H3N2	2009 H1N1	Unknown		Victoria		Yamagata		Unknown		
Influenza	12420	936	7.5%	48	24		859		0 0			6		
Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfl	uenza 1	nza 1 Parainfluenza 2		Parainfluenza 3		Parainfluenza 4				
Parainfluenza	852	19	2.2% 7 3			2			7					
Respiratory virus Test		Tested	Positive (n)	Positive (%)	CoV 229E CoV (		CoV O	C43 CoV NL63			CoV HKU1			
Coronavirus (se	Coronavirus (seasonal) 47		8	17.0%	0	0 2		0		0		6		
Respiratory virus			Tes		Positive (n)				Positive (%)					
RSV			8517			493				5.8%				
Human metapneumovirus		8	13		15			1.8%			)			
Rhino-enterovirus		87	21		65			7.9%						
Adenovirus		4	17		3				6.4%					

# **WISCONSIN STATE SUMMARY**

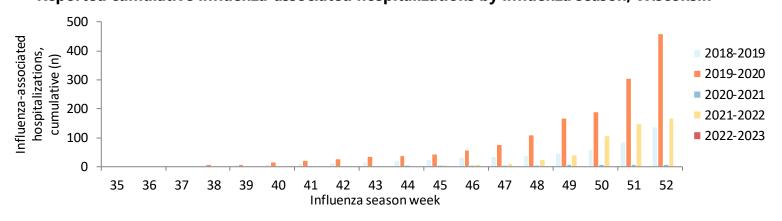
ILI activity trend analysis by influenza season, Wisconsin



Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System October 1, 2022 to present (Hospitalization data will be updated at a later date)

Ago group	Total		Influenza subtype					Required		Postpartum
Age group (years)	reported (n)	A (2009 H1N1)	A (H3N2)	A (Unknown)	В	Not reported	Admitted to ICU	mechanical ventilation	Pregnant	(≤6 weeks)
<1										
1-4										
5-17										
18-49										
50-64										
65+										
Total	/Data will	ho availah	lo at a lat	or data)	•	•	*		•	

Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



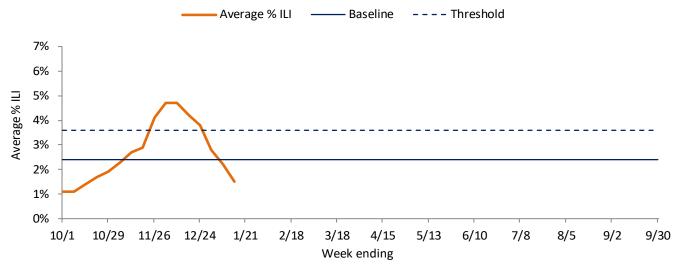
The 2020–2021 influenza season was unusually low due much in part to the ongoing COVID-19 pandemic. As such, numbers for that season are substantially different than previous seasons and should be considered an anomaly.



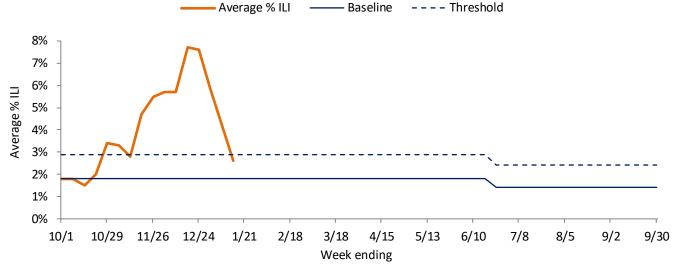
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#### ILI ACTIVITY TREND ANALYSIS

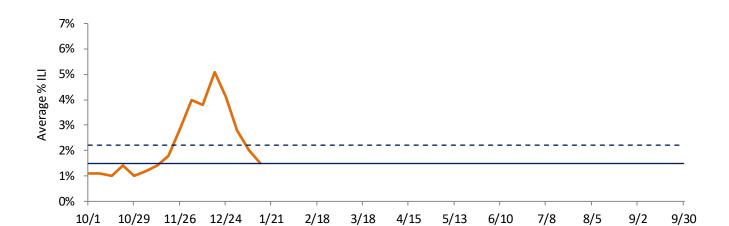
#### Wisconsin



#### **Northeastern Region**



### **Northern Region**

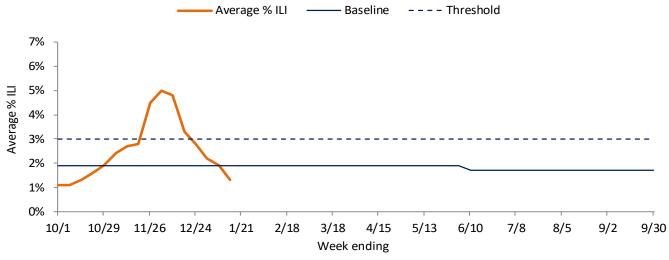


Baseline

Week ending

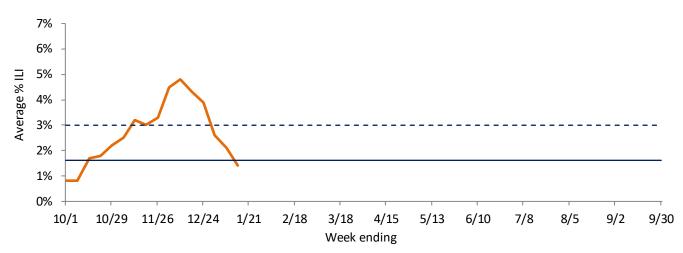
# ILI ACTIVITY TREND ANALYSIS (CONTINUED)

#### **Southeastern Region**



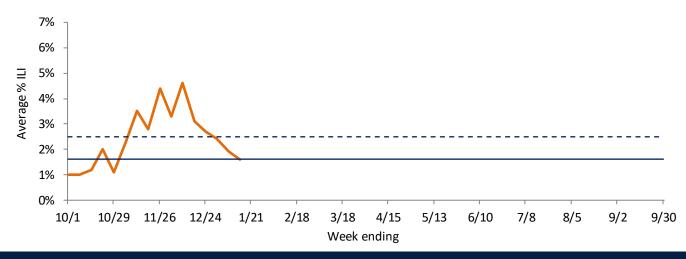
#### **Southern Region**





### **Western Region**





# SEASONAL INFLUENZA VACCINATION

# Influenza vaccine composition 2022-2023:

#### **Egg-based vaccines** are recommended to contain:

- an A/Victoria/2570/2019 (H1N1) pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus (updated);
- a B/Austria/1359417/2021-like virus (B/Victoria lineage (updated);
- a B/Phuket/3073/2013-like virus (B/Yamagata lineage).

#### **Cell- or recombinant-based vaccines** are recommended to contain:

- an A/Wisconsin/588/2019 (H1N1) pdm09-like virus;
- an A/Darwin/6/2021 (H3N2)-like virus (updated);
- a B/Austria/1359417/2021-like virus (B/Victoria lineage) (updated);
- a B/Phuket/3073/2013-like virus (B/Yamagata lineage).

Seasonal flu vaccination data for Wisconsin based on information from the Wisconsin Immunization Registry (WIR) are available on the <a href="DHS Influenza">DHS Influenza</a> <a href="Vaccine Data Dashboard webpage">Vaccine Data Dashboard webpage</a>.

These data are updated on a weekly basis during the influenza season.

# **Understanding the Data**

Surveillance Report Description

INFLUENZA-LIKE ILLNESS (ILI)	Patients who present to a clinician with a fever $\geq$ 100° F and either a cough or sore throat.
INFLUENZA-LIKE ILLNESS ACTIVITY (ILI)	Using baseline (expected values data used for comparison) and threshold (upper limit) ILI percentages in each of the <u>public health regions in</u> <u>Wisconsin</u> , ILI below baseline is considered <b>low activity</b> , ILI between baseline and threshold levels is considered <b>moderate activity</b> and above threshold is considered <b>high activity</b> . <sup>1</sup>
PREDOMINANT VIRUS OF THE WEEK	This data is compiled from over 40 laboratories in Wisconsin that perform rt-PCR testing, and shows the viruses that have the highest percentage of positive tests. <sup>2</sup>
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY	Deaths among children <18 years old, with influenza as the cause or associated cause of death. This is a state and nationally reportable condition. <sup>2</sup>
RESPIRATORY VIRUSES BY PCR	A molecular laboratory method used to detect nucleic acid (DNA/RNA) in viruses, including influenza and RSV.
RAPID ANTIGEN TEST	Identification of an influenza or RSV antigen in a clinical specimen. Data resulting from these tests is used to identify regional trends of the activity of these viruses.
INFLUENZA-ASSOCIATED HOSPITALIZATIONS	Patients hospitalized for >24 hours with laboratory-identified (by rapid antigen or rt-PCR tests) influenza. <sup>3</sup>

#### **ADDITIONAL RESOURCES**

- The CDC Influenza Homepage
- The National Enteric and Respiratory Virus Surveillance System (NREVSS)

#### **DATA SOURCES**

- 1. Centers for Disease Control and Prevention (CDC), Outpatient Influenza-like Illness Surveillance Network (ILINet)
- 2. Wisconsin Laboratory Information Network
- 3. Wisconsin Electronic Disease Surveillance System (WEDSS)

